

Subtitle D Program Overview

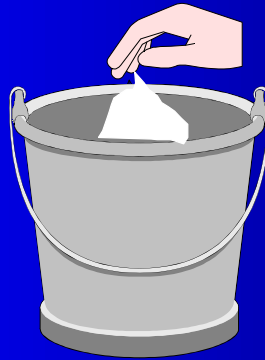
This module provides an overview of the nonhazardous solid waste management program. Objectives include:

1. recognizing the statutory definition of the term “solid waste” (page D-4);
2. recognizing the relationship between the definition of solid waste and RCRA Subtitles C and D (page D-5); and
3. describing briefly the major programs under Subtitle D, which include:
 - guidelines for state solid waste management plans (page D-7),
 - the “Solid Waste Disposal Criteria” (page D-8 and D-9), and
 - municipal solid waste landfill criteria (pages D-10 and D-11).

Purpose of Subtitle D

“[D]eveloping and encouraging methods for the disposal of solid waste which are environmentally sound and which maximize the utilization of valuable resources including energy and materials, which are recoverable from solid waste and to encourage resource conservation.” (42 *United States Code* (USC) 6941)

What is a “solid waste”?



Definition of Solid Waste

“The term ‘solid waste’ means any garbage, refuse, sludge, from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. . . .”

(42 USC 6903)

One oddity about this definition is that a solid waste does not have to be ‘solid’ in the familiar sense. Rather, it is used as a convenient term to describe all types of waste regulated under RCRA.

EPA further defines solid waste as any *discarded* material for which there are no applicable exclusions or variances (40 CFR 261.2).

What Is The Relationship Between The Solid Waste Definition and Subtitles C and D?

- **RCRA regulates all solid waste as either hazardous or nonhazardous**
- **Subtitle D is concerned with nonhazardous solid waste.**
- **Hazardous waste is regulated under Subtitle C.**

What are The Three Major Subtitle D Programs?

- **Guidelines for the development and implementation of state plans - 40 CFR 256**
- **Criteria for classification of solid waste disposal facilities and practices - 40 CFR 257**
- **Criteria for municipal solid waste landfills - 40 CFR 258**

Guidelines For State Solid Waste Management Plans

40 CFR 256

- **Purpose of the guidelines is to assist states in developing and implementing EPA-approved solid waste management plans**
- **The guidelines outline the minimum requirements for state plans and detail how these plans are approved by EPA**
- **Each state plan reflects a state's unique solid waste management needs**

State plans must include the following elements as specified in the guidelines:

- Identifying the responsibilities of state, local, and regional authorities in implementing the plan.
- Establishing a solid waste disposal program that prohibits new open dumps, provides for closing or upgrading all existing open dumps, and establishes any state regulatory powers necessary to implement the plan.
- Developing a strategy for encouraging resource recovery and conservation activities.
- Ensuring that adequate facility capacity exists to dispose of solid waste in an environmentally sound manner.
- Coordinating with other environmental programs.
- Ensuring public participation in plan development, regulatory development, facility permitting, and open dump inventory.

Solid Waste Disposal Criteria

40 CFR 257

- **EPA promulgated standards for solid waste disposal facilities and practices on September 13, 1979 (40 CFR 257).**
- **The criteria provide the basis for the prohibition on “open dumps.”**
- **The primary responsibility for implementing the criteria lies with states.**
- **The criteria include general environmental performance standards addressing eight major topics . . .**

An open dump is a facility that does not comply with the eight criteria established by EPA under 40 CFR 257. (*See next page.*)

EPA is not given authority for the ban on open dumps. States are given primary authority for program development and enforcement. The only action that EPA can take on a person disposing of nonhazardous solid waste in an open dump is to terminate certain grant funds available to the state under RCRA.

Solid Waste Disposal Criteria (continued)

The eight major topics are:

- Floodplains
- Endangered species
- Surface water
- Ground water
- Land application
- Disease
- Air
- Safety

Floodplains - 40 CFR 257.3-1 specifies that facilities or practices in floodplains shall not interfere with the floodplain or result in washout of solid waste so as to pose a hazard to human health, wildlife, or land or water resources.

Endangered or threatened species - 40 CFR 257.3-2 prohibits practices that contribute to the taking of any endangered or threatened species or result in destruction or adverse modification of their habitats.

Surface water - 40 CFR 257.3-3 specifies that disposal facilities shall not cause a discharge of pollutants or dredged or fill material to waters of the United States. To do so is in violation of Section 402 and/or Section 404 of the Clean Water Act.

Ground water - 40 CFR 257.3-4 lays out the ground water protection standards, which require that facilities and practices not exceed the Safe Drinking Water Act Maximum Contaminant Levels (MCLs) in an underground drinking water source beyond the solid waste unit boundary or beyond an alternative boundary specified by the state.

Land application - 40 CFR 257.3-5 requires that a facility or practice meet certain restrictions with respect to the concentrations of cadmium and PCBs contained in waste applied to land used for producing food crops.

Disease - 40 CFR 257.3-6 specifies that waste disposal facilities and practices must institute appropriate disease vector controls, such as periodic application of cover material. In addition, 40 CFR 257.3-6 requires pathogen reduction processes for sewage sludges and septic tank pumpings applied to land.

Air - 40 CFR 257.3-7 prohibits open burning of solid waste and specifies that the applicable requirements of the State Implementation Plans developed under Section 110 of the Clean Air Act must be met.

Safety - 40 CFR 257.3-8 requires control of explosive gases, fires, bird hazards to aircraft, and public access to the facility.

Compliance with Part 257 and the ban on dumping can be enforced through citizen suits (Section 7002 of the Act) or by the state.

MSWLF Criteria

40 CFR 258

- **Developed by EPA under HSWA authority to improve upon the Part 257 criteria**
- **The regulations were promulgated October 9, 1991 and became effective October 9, 1993**
- **Primary responsibility still lies with states, as in 40 CFR 257**
- **These criteria apply only to MSWLFs. All other solid waste disposal facilities are regulated under 40 CFR 257 or Subtitle C**

The 1984 HSWA required EPA to conduct a study and report to Congress on the adequacy of the Part 257 criteria. Congress also specifically directed EPA to revise the criteria to address facilities that receive hazardous household waste or hazardous waste from conditionally exempt small quantity generators [i.e., municipal solid waste landfills (MSWLF) as defined in 40 CFR 258.2]. Congress required that, as a minimum, the revisions should require ground-water monitoring to detect contamination, establish criteria on the acceptable location of new or existing facilities, and provide for corrective action, as appropriate. In addition, HSWA required states to develop permit programs or other systems of prior approval and conditions for facilities receiving household hazardous waste and hazardous waste from small quantity generators.

EPA determined from its study that a serious problem existed at MSWLFs. Many landfills did not use adequate environmental controls such as clay or synthetic liners, leachate collection systems and ground-water monitoring. EPA's Report to Congress concluded that MSWLFs such as these posed a significant threat to ground and surface waters and that the existing criteria were inadequate.

The result of EPA's study was the promulgation of Subtitle D revisions under 40 CFR Part 258.

MSWLF Criteria (continued)

Some of the important criteria under 40 CFR 258 include:

- Procedures for excluding receipt of hazardous waste and PCBs
- Cover material requirements
- Run-on/Run-off control systems
- Surface water requirements
- Design criteria, including composite liner and leachate collection system
- Groundwater monitoring and corrective action
- Closure and post-closure care

These are just a few of the areas of regulation under 40 CFR 258.

Subtitle D In Summary

- **Subtitle D is the provision of RCRA that deals with management of nonhazardous solid waste**
- **Subtitle D attempts to meet RCRA's intent of protecting human health and the environment by:**
 - **establishing criteria for disposal of nonhazardous solid waste**
 - **placing stringent regulations on MSWLFs that may receive small amounts of hazardous waste**
- **Subtitle D is a small part of a complex statute**